

Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the application.

Listing of Claims

Claim 1. (Currently amended)[[:]] Base A base insert device for the formation of crossed bases in crossed base valve paper bags, ~~for the formation of crossed bases in paper bags,~~ said device comprising ~~the following characteristics:~~

~~Folding~~ folding devices which introduce folds at ~~the~~ ends of ~~the~~ tubular sections from which the bags are produced;

~~One~~ one or more gluing stations, which apply glue to ~~the~~ regions of the folds for gluing and/or ~~the~~ to sheets ~~(5)~~ provided for gluing to the bases in the gluing stations; and

~~At~~ at least one pressing station in which the folded bases and the sheets ~~(5)~~ are brought into contact and glued[[:]],

~~Said device is characterized by~~

at least one of the gluing ~~station for the sheets and/or bases that comprises~~ stations including glue outlet openings ~~(22)~~ which may be selectively supplied with glue[[:]], ~~whereby~~ such that the selection of the glue outlet openings ~~(22)~~ defines ~~the~~ a format of the glue application ~~(6, 7, 8, 9), and~~

~~whereby~~ said glue outlet openings ~~(22)~~ are being provided with at least two application heads ~~(1)~~ of which at least one

application head ~~(1)~~ ~~may be displaced~~ is displaceable in a direction ~~(y)~~ orthogonal to ~~the~~ a feed direction of the sheets ~~(5)~~ and/or the folded bases such that as a result of the displacement, a relative movement of the two application heads ~~(1)~~ occurs.

~~Claim 2.~~ (Currently amended)[[:]] ~~Base~~ The base insert device pursuant according to claim 1 characterized ~~in that in the gluing station every~~ wherein each application head ~~(1)~~ is provided with an application plate ~~(2)~~ in which several glue outlet openings ~~(22)~~ are each arranged equidistantly at a distance (A) on one line in ~~the~~ a direction ~~(y)~~ perpendicular to the feed direction of the sheets ~~(5)~~ and/or the folds of the bases, ~~whereby the~~ application plates ~~(2)~~ ~~are arranged in~~ being configured such a way that ~~the~~ adjoining glue outlet openings ~~(22)~~ of two different application heads ~~(1)~~ ~~can take up~~ are positionable at a different distance than the distance (A).

~~Claim 3.~~ (Currently amended)[[:]] ~~Base~~ The base insert device pursuant according to claim 1 characterized ~~in that~~ wherein in ~~the gluing station,~~ the two application heads ~~(1)~~ are displaceably supported on a common guide rail ~~(13)~~.

~~Claim 4.~~ (Currently amended)[[:]] ~~Base~~ The base insert device
~~pursuant~~ according to claim 1 ~~characterized by~~ further comprising
at least one spindle drive ~~(15, 16)~~ for providing that provides
the force ~~for moving~~ to move at least one of the displaceable
application head ~~(1)~~ heads.

~~Claim 5.~~ (Currently amended)[[:]] ~~Base~~ The base insert device
~~pursuant~~ according to claim 4 ~~characterized in that~~ wherein the
spindle ~~(15)~~ can be is driven using a motor.

~~Claim 6.~~ (Currently amended)[[:]] ~~Base~~ The base insert device
~~pursuant~~ according to claim 1 ~~characterized by~~ further comprising
~~means for~~ a device that automatically ~~displacing~~ displaces the
application head ~~(1)~~ and a control unit that controls the
displacement.

~~Claim 7.~~ (Currently amended)[[:]] ~~Base~~ The base insert device
~~pursuant~~ according to claim 6 ~~characterized in that the~~ wherein a
target image of the glue application ~~(6, 7, 8, 9)~~ can be is
supplied to the control unit and ~~that~~ the control unit ~~comprises~~
~~means to calculate the~~ calculates target positions of ~~the~~ glue
traces ~~(6, 7, 8, 9)~~ to be that are extruded from the glue outlet
openings based on the target image.

~~Claim 8.~~ (Currently amended)[[:]] ~~Base~~ The base insert device ~~pursuant~~ according to claim 6 ~~characterized by~~ wherein the device that automatically displaces the application head includes a spindle attached to an outer application head and a rod that supports the application heads in a frame, and said base insert device further comprising position sensors[[:]] which record ~~the~~ an actual position of ~~a~~ the spindle ~~(15)~~ and/or the rod ~~(11)~~ and notify the control unit.

~~Claim 9.~~ (Currently amended)[[:]] ~~Base~~ The base insert device ~~pursuant~~ according to claim 1 ~~characterized in that~~ wherein all of the application heads ~~(1)~~ of the gluing station ~~can be~~ are supplied with glue from one common glue supplying line[[:]] ~~which~~ ~~guides the glue directly towards the application heads.~~

~~Claim 10.~~ (Currently amended)[[:]] ~~Base~~ The base insert device ~~pursuant~~ according to claim 9 ~~characterized in that~~ wherein the glue supplying line ~~runs essentially~~ extends in a direction ~~(y)~~ substantially orthogonal to the feed direction of the sheets ~~(5)~~ and/or of the bases of the bags.

~~Claim 11.~~ (Currently amended)[[:]] ~~Base~~ The base insert device ~~pursuant~~ according to claim 9 ~~characterized in that~~ wherein the glue supplying line is ~~designed~~ configured as a guide rail ~~(13)~~.

~~Claim 12.~~ (Currently amended)[[:]] ~~Base~~ The base insert device ~~pursuant~~ according to claim 1 ~~characterized by further comprising~~ guide elements ~~(19)~~ which guide the bag components to be glued in the region of the gluing station, ~~whereby~~ the guide elements ~~(19)~~ ~~can be displaced~~ being displaceable together with the displaceable application head ~~(1)~~.

~~Claim 13.~~ (Currently amended)[[:]] ~~Method for~~ A method of operating a the base insert device ~~pursuant~~ according to claim 1 3 ~~characterized in that in the gluing station, wherein one of the~~ application head ~~(1)~~ heads remains stationary with respect to the guide rail ~~(13)~~ during the format adjustment.

~~Claim 14.~~ (Currently amended): ~~Process pursuant~~ The method according to claim 13 ~~characterized in that wherein~~ the format is defined by three application heads ~~(1) of which the~~ including a middle ~~one~~ head that remains stationary with respect to the guide rail ~~(13)~~ during the adjustment of the format.

15. (New) A base insert device that forms a crossed base in a crossed base valve paper bag comprises:

a folding device that introduces folds at a base end of a bag section;

a gluing station that applies glue to the folds that are to be glued and/or to a sheet that is to be glued to the base end, the gluing station including at least two application heads having a plurality of glue outlet openings that are selectively supplied with glue such that the selected openings define a format of the glue application, at least one of the application heads being displaceable in a direction orthogonal to a feed direction of the folded bag section and/or the sheet such that as a result of the displacement, a relative movement between the two application heads occurs; and

a pressing station that contacts the applied glue, the folded base end, and the sheet so as to form the crossed base.

16. (New) The base insert device according to claim 15, wherein the head is displaceable such that a separation distance between a glue outlet opening of a first head and a glue outlet opening of a second head is less than a distance between adjacent glue outlet openings on each of the heads.

17. (New) A base insert device that forms a crossed base in a crossed base valve paper bag comprises:

a folding device that introduces folds at a base end of a bag section;

a gluing station that applies glue to the folds that are to be glued and/or to a sheet that is to be glued to the base end, the gluing station including at least two application heads with at least one of the application heads being displaceable in a direction orthogonal to a feed direction of the folded bag section and/or the sheet such that as a result of the displacement a relative movement between the two application heads occurs, and each application head having an application plate that includes a plurality of glue outlet openings arranged linearly and equidistantly at a distance (A) in a direction perpendicular to the feed direction of the folded bag section and/or the sheet, the application plates being configured such that adjacent glue outlet openings of two different application heads are positionable at a different distance than the distance (A); and

a pressing station that contacts the applied glue, the folded base end, and the sheet so as to form the crossed base.

Amendments to the Abstract

Replace the abstract with the following replacement abstract:

~~The present invention relates to a~~ A ~~base insert device for crossed base valve bags for the formation of that forms~~ crossed bases in crossed base valve paper bags ~~[[,]] by means of~~ has ~~folding devices which introduce folds at the ends of the tubular sections from which the bags are produced,~~ with one or more gluing stations ~~[[,]]~~ which apply glue to the regions of the folds for gluing and/or the sheets ~~(5)~~ provided for gluing to the base, ~~in the gluing stations~~ and at least one pressing station in which the folded bases and the sheets ~~(5)~~ are brought into contact and glued.

~~The novelty of the present patent application is that at~~ At ~~least one gluing station for the sheets and/or bases is provided, comprising~~ has ~~glue outlet openings (22) which may~~ can ~~be selectively supplied with glue~~ ~~[[,]] whereby~~ such that the selection of the ~~glue outlet~~ ~~openings (22)~~ defines the format of the glue application ~~(6, 7, 8, 9)~~. ~~Said glue outlet~~ The ~~openings (22)~~ are provided with at least two application heads ~~(1)~~ of which at least one ~~application head (1) may be displaced~~ is displaceable in a direction ~~(y)~~ orthogonal to the feed direction of the sheets ~~(5)~~ and/or the folded bases such that as a result of the displacement, a relative movement of the two application heads ~~(1)~~ occurs.

~~(Figure 2)~~

For the examiner's convenience, a clean text version of the replacement abstract (145 words) is presented below:

A base insert device that forms crossed bases in crossed base valve paper bags has folding devices which introduce folds, one or more gluing stations which apply glue to the regions of the folds for gluing and/or the sheets provided for gluing to the base, and at least one pressing station in which the folded bases and the sheets are brought into contact and glued. At least one gluing station has glue outlet openings which can be selectively supplied with glue such that the selection of the openings defines the format of the glue application. The openings are provided with at least two application heads of which at least one head is displaceable in a direction orthogonal to the feed direction of the sheets and/or the folded bases such that as a result of the displacement, a relative movement of the two application heads occurs.